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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 12

Serial Number: 08/182409  
Filing Date: January 14, 1994  
Appellant(s): Bardeen

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EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed  
July 3, 1995.

(1) *Status of claims.*

The statement of the status of claims contained in the brief  
is correct.

(2) *Status of Amendments After Final.*

The appellant's statement of the status of amendments after  
final rejection contained in the brief is correct.

(3) *Summary of invention.*

The summary of invention contained in the brief is correct.

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(4) *Issues.*

The appellant's statement of the issues in the brief is correct.

(5) *Grouping of claims.*

Appellant's brief includes a statement that claims do not stand or fall together and provides reasons as set forth in 37 C.F.R. § 1.192(c) (5) and (c) (6).

(6) *Claims appealed.*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(7) *Prior Art of record.*

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

4,169,169	Kitabatake	9-1979
4,490,410	Takiyama et al.	12-1984
4,024,287	Golchert	5-1977

(8) *New prior art.*

No new prior art has been applied in this examiner's answer.

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(9) *Grounds of rejection.*

The following ground(s) of rejection are applicable to the appealed claims.

***Claim Rejections - 35 USC § 103***

Claims 1,3,4,6-8,11-13,17,20,21 and 32 are rejected under 35 U.S.C. § 103 as being unpatentable over Kitabatake (4,169,169) and Takiyama et al. (4,490,410).

Kitabatake teaches a transferring process comprising the steps of: a) providing a transfer sheet comprising a substrate and a pattern layer comprising lower alcohol-soluble, water-insoluble dyes provided on at least one surface of the substrate; b) wetting the pattern layer of the transfer sheet with a transfer solution containing lower alcohols and bringing the transfer sheet into close contact with a receiving surface onto which the pattern is to be transferred in such a manner that the pattern layer contacts the receiving surface; c) maintaining the transfer sheet in close contact with the receiving surface under pressure; and d) peeling the transfer sheet from the receiving surface thereby to leave a transferred pattern corresponding to the pattern of the transfer sheet on the receiving surface (see abstract). The substrate 1 constituting the transfer sheet may be composed of various papers, plastic films or composite films.

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The pattern layer can be produced by using an ink composition containing lower alcohol-soluble, water-insoluble dyes for example by various printing means. The dyes are non-toxic to the skin (col. 2, line 61 - col. 3, line 69). The transfer pattern contains a solvent which effectively promotes drying at the time of printing and can be dried by natural drying or forced drying (col. 4, lines 43-46). In addition the solvent may be dispersed in water (col. 4, lines 41-42). The transfer solution is applied on the receiving surface onto which the dye pattern is to be transferred (col. 4, lines 55-57). The transfer pattern is then applied to the treated receiving surface and when the transfer solution has partly dried, the transfer sheet is peeled from the receiving surface (col. 5, lines 7-19). Further, when the transfer solution contains a resin, an undercoating film is formed under the transferred pattern. This film exhibits an anchoring effect for the receiving surface and at the same time, protects the dye of the transferred pattern (col. 5, line 67 - col. 6, line 15).

Kitabatake fails to explicitly recite that the transferring solution is curable and forms a film on which the pattern is being transferred as well as the use of a "viscous" preparatory layer.

Takiyama et al. teaches a method of coating a stock or shaped body with an active curable resin; placing a pre-printed

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pattern film so as to contact the resin with the pattern at a stage where the resin still remains in a liquid or sticky gelled state prior to curing, said pattern being printed with an ink having a greater affinity to said resin than said film, irradiating a beam to cure the resin thereby transferring the pattern to cured resin surface, removing the film and thereafter coating the transferred pattern bearing resin surface with a translucent film (see abstract). It would have been obvious at the time the invention was made to have utilized Takiyama et al.'s resin transferring layer in Kitabatake's transfer process because of the improved water resistance associated with this type of transferring process as well as the expectation of achieving similar success.

Claims 9,10,15 and 21 are rejected under 35 U.S.C. § 103 as being unpatentable over Kitabatake (4,169,169) and Takiyama et al. (4,490,410) in view of Golchert (4,024,287).

Features described above in rejecting claims 1,3,4, 6-8,11-13,17,20,21 and 32 over Kitabatake (4,169,169) and Takiyama et al. (4,490,410) are incorporated here.

Kitabatake and Takiyama et al. fail to teach 1) the active step of drawing the pattern on the transfer sheet as opposed to using a "pre-printed" sheet, tracing the "pre-printed" pattern, and coloring the pre-painted portions, 2) a transfer solution

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comprising a "stick" glue, paste or egg white and 3) the transfer pattern being a water-soluble ink.

Golchert teaches a method of decorating food items by placing a transparent shield over a selected design to be transferred to the food item placing a sheet of thin transfer medium over the shield and design to be traced, tracing said design on the transfer medium using edible ink, placing the medium on the food item to be decorated with the colored side down, and placing a damp pad on the exposed back face of the transfer medium, thereby causing the traced design to be transferred to the food item (see abstract). The design is either drawn originally or traced onto a sheet of transfer medium, using various colors of water soluble edible type ink material (col. 1, lines 52-55). Thereafter the decorator may proceed to use colored frosting or gels to fill in the design (col. 65-67).

It would have been obvious at the time the invention was made to have utilized Golchert's method of producing printing transfer patterns for Kitabatake's "pre-printed" transfer patterns because one skilled in the art would be able to capture the decorator's "unique" creative designs. In addition, the use of transfer sheets, both "pre-printed" and "designed" are well known in the art. It is the examiner's position that one skilled in the art would have a reasonable expectation of achieving

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similar success by using "pre-printed" transfer sheets as opposed to "designed" transfer sheets. Therefore, without the showing of unexpected results, the difference is considered an obvious modification of one another and is deemed unpatentably distinct.

(10) *New ground of rejection.*

This Examiner's Answer does not contain any new ground of rejection.

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(11) *Response to argument.*

Appellant argued that "It is specious to suggest that the ordinarily skilled artisan would think to use an irradiation cure (ultraviolet light) on the human skin (Appeal Brief, pg. 7, lines 9-23, Issue (A)).

As indicated in the Final Rejection, the examiner has stated that "Kitabatake fails to explicitly recite that the transferring solution is curable and forms a film on which the pattern is being transferred as well as the use of a "viscous" preparatory layer. Kitabatake does teach "when the transfer solution contains a resin, an undercoating film is formed under the transferred pattern. This film exhibits an anchoring effect for the receiving surface and at the same time, protects the dye of the transferred pattern (col. 5, line 67 - col. 6, line 15). Kitabatake also discloses that the transfer solution has partially dried (col. 5, lines 7-19). Therefore, it is the examiner's position that Kitabatake clearly suggest to one skilled in the art that the transfer solution, i.e. appellant's preparatory layer, receives the transfer pattern prior to being fully cured. Additionally, Takiyama et al. specifically teaches a method of coating a stock or shaped body with an active curable resin; placing a pre-printed pattern film so as to contact the resin with the pattern at a stage where the resin still remains

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in a liquid or sticky gelled state prior to curing, said pattern being printed with an ink having a greater affinity to said resin than said film, irradiating a beam to cure the resin thereby transferring the pattern to cured resin surface, removing the film and thereafter coating the transferred pattern bearing resin surface with a translucent film (see abstract and also col. 4, lines 8-15). Takiyama et al. clearly teaches a "viscous" layer to which a pattern is transferred thereto.

Appellant argued that the terms "water soluble" referring to the design pattern and "water based" referring to the surface preparatory composition distinguishes the instant application over the prior art of record (Appeal Brief, pg. 9, lines 6-16, Issue (B)).

The examiner respectfully disagrees. While the examiner acknowledges the fact that Takiyama et al., col. 2, lines 31-35, teaches that it is difficult to use water soluble inks, Takiyama teaches that the printed ink with which the decorative pattern (D) is printed should have a greater affinity to the resin than the film on which said ink is printed hereon. Thus no particular limitation of the type of ink should be imposed provided that said ink would have a greater adhesiveness between the ink and the resin than that between the ink and the film (col. 5, lines 1-8). Furthermore, Takiyama et al. discloses inks which

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employ a water soluble resin as vehicles can be used (col. 5, line 33 - col. 6, line 52).

It is noted that the examiner has taken the position that the use of water soluble inks in combination with water based preparatory surfaces is conventional. The techniques of applying a transfer pattern to a moistened surface or applying a wet material to the back side of a transfer pattern to release the pattern are conventional.

Appellant argued that the use of water-based surface preparatory composition is not shown in the art of record, i.e. the composition is water insoluble (Appeal Brief, pg. 10, lines 1-20, Issue (C)).

Takiyama et al. discloses that "if the curable resin initially applied was a hydrophilic of a water soluble type, it would become possible to transfer a pattern along with the curing of the resin" (col. 5, lines 45-48).

Appellant argued that the combination of the water based ink and the viscous water based surface preparatory composition is not disclosed in the art (Appeal Brief, pg. 10, lines 24-26, Issue (D)).

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As indicated in the Brief, these issues have been addressed separately (Issues A, B and C). Therefore the examiner does not repeat them here but incorporates the same by reference.

Appellant argued that the group of materials from which the preparatory composition is to be selected, specifically, water based glues, water based paints and egg whites, is not disclosed in the art (Appeal Brief, pg. 11, lines 9-14, Issue (E)).

As noted above, Takiyama teaches a surface preparatory composition which utilizes a resin in a liquid or sticky state whereby the transfer pattern is "transferred" and then the resin is finally cured. Additionally, Takiyama teaches that the surface preparatory can be water based (Issue (C) above). Therefore, the examiner has taken the position that one skilled in the art would have a reasonable expectation of similar success regardless of the water based preparatory composition. The examiner has requested applicant to show unexpected results from the particular compositions utilized, amend claims commensurate in scope with the showing, then the examiner will consider withdrawing the rejection (see Final Rejection, pg. 10). Applicant has not done so.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

*Brian K Talbot*

Brian K. Talbot  
September 29, 1995

*MPB*  
SHRIVE BECK  
SUPERVISORY PATENT EXAMINER  
GROUP 1100

Timothy J. Martin  
9250 W. 5th Avenue, Suite 200  
Lakewood, Colorado 80226